

Determinants of Sharia-compliant and Non-compliant Capital Structure in the Cyclical Consumer Sector

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Abstract. Indonesia is a predominantly Muslim country, so investing in stock instruments that comply with Sharia provisions is a major concern for investors in Indonesia. This research aims to compare the determining factors of capital structure in Sharia and non-sharia companies. This research sample used a purposive sampling method to obtain 66 sharia-compliant and 30 noncompliant companies from the cyclical consumer sector listed in the Indonesia Stock Exchange from 2020-2022. This research used panel data regression method. Profitability and liquidity have a negative effect on sharia-compliant and noncompliant leverage. Firm size has a positive effect on sharia-compliant and noncompliant leverage. EVAL (earning volatility) has a negative effect on sharia-compliant market leverage and a significant positive effect on noncompliant book leverage. In noncompliant, GDP has a positive effect on market leverage. The novelty of this study is to add business risk as an independent variable. This study is expected to guide financial managers on the use optimal capital structure in sharia and non-sharia companies to increase the shareholders wealth. Investors are recommended to choose enterprises with high level of profitability, liquidity, and firm size, as well as low earnings volatility.

Keywords: Earnings volatility; Firm size; Leverage; Liquidity; Profitability.

Abstrak. Indonesia merupakan negara yang mayoritas penduduknya beragama Islam, sehingga kegiatan berinvestasi pada instrumen saham yang sesuai ketentuan syariah menjadi perhatian utama bagi investor di Indonesia. Tujuan penelitian ini adalah untuk membandingkan faktor-faktor penentu struktur modal pada perusahaan syariah dan non-syariah. Purposive sampling digunakan untuk menentukan sampel dan mendapatkan 66 perusahaan syariah serta 30 perusahaan non-syariah dari sektor konsumen siklikal yang terdaftar di Bursa Efek Indonesia periode tahun 2020-2022. Penelitian ini menggunakan metode regresi pada data panel. Profitabilitas dan likuiditas berpengaruh negatif terhadap leverage buku dan leverage pasar pada perusahaan syariah dan non-syariah. Size perusahaan berpengaruh positif terhadap leverage pada perusahaan syariah dan

non-syariah. Di sisi lain, EVAL (earning of volatility) berpengaruh negatif terhadap leverage pasar perusahaan syariah dan berpengaruh positif signifikan terhadap leverage buku perusahaan non-syariah. Pada perusahaan non-syariah, pertumbuhan PDB berpengaruh positif terhadap leverage pasar. Kebaruan penelitian ini terletak pada penambahan risiko bisnis sebagai variabel independen. Hasil penelitian ini diharapkan dapat mengarahkan manajer keuangan untuk mewujudkan penggunaan struktur modal yang optimal pada perusahaan syariah dan non-syariah yang dapat meningkatkan kesejahteraan pemegang saham. Selanjutnya, investor disarankan untuk memilih perusahaan dengan tingkat profitabilitas, likuiditas, dan ukuran perusahaan yang tinggi, serta volatilitas laba yang rendah.

Kata kunci: Leverage; Profitabilitas; Likuiditas; Ukuran perusahaan; Volatilitas pendapatan.

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BACKGROUND

Corporate finance provides support for all businesses. Making judgments about the capital structure mix of an organization is part of corporate finance. Regardless of its size, every business needs money to purchase assets, engage in investment activities, buy raw materials for its operations, and pay wages and salaries to its employees. Therefore, a company's financial decisions determine whether or not it will succeed. Investment strategy should be built based on the company's capital structure (Amin & Cek, 2023).

A firm's capital structure consists of various funding possibilities for its assets. Therefore, debt and equity are both components of the capital structure (Kumar Panigrahi et al., 2021). Many things can affect the capital structure, including profitability, size, tangibility, earnings volatility, growth opportunities, liquidity, nondebt tax shield, GDP growth, business risk (Akbar et al., 2023). Leverage is one that affects the determination of the company's capital structure. By using debt as a source of funds, leverage is important for a company that can be used to determine the best financing and investment options (Kusuma et al., 2021).

Among the nations where the majority population is Muslim is Indonesia, so this has triggered the emergence of sharia-compliant companies. The more companies that follow sharia, the more attractive religious investors will be (Akbar et al., 2023). As the Islamic financial sector develops, the IDX sets indexes for sharia companies such as the Indonesian Sharia Stock Index (ISSI), Jakarta Islamic Index (JII), JII70, IDX-MES BUMN 17, IDX SHARIA GROWTH (<https://www.idx.co.id>).

Sharia-compliant companies are companies that comply with the restrictions set forth in Islamic law (Bugshan et al., 2021). The application by sharia-compliant companies of financial and non-financial products and services has two criteria, i.e.: (1) qualitative: whether the business is involved in an industry that is haram according to Islam; and (2) quantitative: whether the business is a business whose finances meet the permissible threshold. Tobacco, alcohol, pork, and traditional financial services including

banks and insurance are typically prohibited or haram industries. Quantitative criteria usually look at a company's interest income, debt, and receivables, which follow usury in Islam. If a business satisfies both qualitative and quantitative requirements, then it is considered an Islamic company (Cheong, 2021). The current Sharia Securities List (DES) publicizes the financing thresholds set by OJK, which are as follows: total interest-based debt to total assets cannot exceed 45 percent, and total interest income and other non-halal profits cannot surpass 10 percent of operating revenue and other income (<https://www.ojk.go.id/>).

The sharia-compliant firms have restrictions in choosing external financing. This could result in higher external funding costs and transaction costs, as the trade-off theory explains. In addition, it may be more appropriate for sharia-based businesses to prioritize internal funding options, as suggested in the pecking order theory (Cindy et al., 2023).

Previous literature findings suggest that leverage of both sharia compliant (SC) and noncompliant companies (NC) is significantly adversely impacted by profitability and liquidity. The leverage of sharia-compliant corporations is negatively impacted by their size, whereas the leverage of noncompliant companies is positively affected by their size. Tangibility has a negative effect on the leverage of sharia compliant companies. Earning Volatility has a positive effect on the leverage of sharia compliant companies. Growth opportunities and non-debt tax shield have a positive effect on the leverage of sharia compliant and noncompliant companies. GDP growth has a positive effect on the leverage of sharia compliant companies and has a negative effect on the leverage of noncompliant companies (Akbar et al., 2023).

The consumer cyclical sector was chosen because it wants to see the determinants of capital structure in a sector that is very vulnerable to being affected by the country's economic conditions. When the economy is growing, people tend to reduce or eliminate the use of non-primary goods. The strengthening of the JCI in 2021 was driven by the contribution of a very significant increase in the growth of the consumer cyclical sector, which amounted to 3.55% (BEI). This can confirm that consumer cyclical is highly affected by economic conditions, when the Indonesian economy began to recover from the Covid-19 pandemic, people began to fulfill their non-primary needs again.

Based on the aforementioned phenomenon and background above, a study was done with the intention to compare the determining factors of capital structure in sharia and non-sharia companies in the cyclical consumer sector by adding business risk variables in according to studies carried out by Ali et al. (2022).

THEORETICAL REVIEW

Leverage

The dependent variables in this study use book and market leverage. Book leverage is considered the best measurement to see managerial action while market leverage is used to measure leverage based on the availability of information available in the market (Akbar et al., 2023). Book leverage has lower volatility than market leverage, so it is more commonly used for academic research (Minh et al., 2022). Market leverage shows fluctuations in financial leverage over time. In addition, market leverage is considered to be able to explain in detail about company ownership by stakeholders (Minh et al., 2022).

Profitability

Profitability is the ability to generate profits (Prihadi, 2020). Profitability is one of the methods needed by a firm to assess how much the firm's ability to generate profits and assets or capital that depend on equity will be compared with each other. According to (Kasmir, 2019) profitability is a proportion to measure the firm's capability to earn profits during limited time period and gives a measure from performance of operational management which is sales results are shown in the profits generated. Meanwhile, according to Trade Off Theory, profitable business is used to pay debts that come from appropriate funds, thus cutting operational costs. Wherefore, the pot recommends that businesses by greater gains consider debt tax protection more worth and utilize greater their assets are financed from debt so that they can generate the most tax benefits from their debt (Akbar et al., 2023).

Firm Size

Firm size or size refers to the ability of large firms to gain more experience in the industry and a higher standing in the debt market, so they will not easily go bankrupt. Size is a measure used to determine how large or small a company is, which can be measured by its total assets (Toni et al., 2021). The larger a company is, the easier it is for it to obtain funds from external parties (Krisnando & Novitasari, 2021). Because they have more negotiating power and can therefore lower the cost of debt, Trade-off Theory indicates that large enterprises utilize more debt. In contrast, according to the Pecking Order Theory, large corporations have a higher chance of securing equity financing since their scale allows them to issue new shares with greater information than smaller businesses can. Therefore, the adverse selection cost of large companies will be reduced because when they issue new shares, they divulge more details than smaller companies (Akbar et al., 2023).

Tangibility

Tangibility is the tangible assets owned by a company that are used to support the company's operational activities. Tangible fixed assets can include buildings, land, and production machinery. Companies that have many tangible assets can also use a lot of leverage. This happens because tangibility shows how big or small a company is, so the use of leverage can increase (Widodo, 2020).

Earnings Volatility

Earnings volatility represents the rate of return on the company's total investment before taxes and loan interest are deducted. Volatility is a useful statistic that investors consider when extending credit to a company. This is because businesses with comparatively steady earnings have a higher chance of being approved for loans or withdrawals of foreign capital than those with erratic earnings. Through the utilization of foreign capital, any company with consistent earnings will always be able to meet its financial responsibilities. On the other hand, businesses with erratic and unpredictable earnings are more likely to face financial difficulties in covering interest costs or installment payments (Anwar, 2019).

Growth Opportunities

Growth Opportunities is a factor that affects the capital structure so that it can determine a more appropriate capital structure. Growth Opportunities is an opportunity

for the company's growth in the future, companies that have good future prospects and rapid growth really need large funds in the future. Each company wants growth or increase in its company, with a relatively high and positive effect on external or internal parties with a greater level of surplus. The company's growth opportunity is a point of view to determine how far the company will grow in the future (Anggriani et al., 2020). Wijaya and Ardini (2020) say that growth opportunity is a factor that can affect capital structure. Growth opportunity is a company's opportunity to grow in the future, companies that have good future prospects and rapid growth really need large funds in the future.

Liquidity

Liquidity is one that can affect the capital structure of the company. Liquidity takes into account how easily the company handles its short-term debt (Boateng et al., 2022). By referring to the pecking order theory, companies will use its current assets to fulfill its short-term liabilities (Muliani et al., 2023). Companies that have a good level of liquidity can attract investor attention. Companies that have a high level of liquidity are considered easier to finance all of their company's operations compared to companies that have a low level of liquidity (Kepramareni et al., 2023).

Non-debt Tax Shield (NDTS)

One factor that affects the company's leverage and helps secure its assets is called NDTS. Enterprises with high NDTS tend to issue less debt since the tax benefits are replaced. Because of the substantial depreciation of the enterprise's assets, Wulandari and Artini (2019) suggest that the amount of NDTS, which indicates the reduction of taxes deriving apart from the use of debt, does not affect the optimal use of debt in capital. With the reporting and payment of taxes made by the company, of course there are costs that come from tax benefits other than the use of debt in the company. This cost is usually known as the non-debt tax shield. Supriyono et al. (2020) discovered that the amount of fixed assets owned by the business grew with the value of NDTS as measured by depreciation.

Growth Domestic Product (GDP)

The market worth of all final goods and services in a nation during a given time period, often a year, is measured by the GDP. GDP is perceived as a critical indicator in estimating a country's rate of economic growth. Although, GDP is a significant indication of a nation's economic expansion, it is important to remember that GDP does not always measure the overall welfare and quality of life of a country's people. Therefore, it is also necessary to consider other indicators such as Inflation and currency exchange rates to be able to provide a more complete picture of a country's economic condition (Putra, 2021). When the economy grows, enterprises plan to grow in order to boost sales and profits. In conclusion, companies that rely on internal capital and have better profitability are less likely to use debt (Akbar et al., 2023).

Business Risk

Business risk is a deviation from something targeted by the company and is caused by the uncertainty of its business operations. This means that the greater the operating costs borne by the company, the higher the risk of bankruptcy. So that companies tend to reduce the proportion of leverage usage so that companies can continue to operate their business using internal company data. Business risk is one of the important components

for the sustainability of the company today and in the future (Azmi et al., 2021). Business risk is a risk that arises because the company is not sure it can generate income in the future. The company must fulfill all responsibilities arising from the loans given to it (Puspita & Dewi, 2019). Firms that have high business risk will use debt to finance their operational activities (Hakim & Apriliani, 2020).

The effect of Profitability (PROF) on Leverage

A company's profitability can be used to gauge its capacity to fund its own operations without using external funding. Research results by Akbar et al. (2023) demonstrates that the leverage is significantly impacted negatively by profitability of sharia-compliant and noncompliant companies because companies with higher profits are considered more capable of utilizing internal resources rather than debt to finance business growth. Research results by Ali et al. (2022) reveals that the leverage is significantly positively affected by profitability of sharia-compliant and noncompliant companies.

H₁: Profitability affects Leverage.

The effect of Size on Leverage

Akbar et al. (2023) prove that the leverage of sharia-compliant enterprises is negatively impacted by their size, whereas the leverage of noncompliant companies is positively impacted by their size. It's indeed interpreted that sharia-compliant companies tend to use more internal sources of funds than noncompliant companies. Other research results from Hussain et al. (2023), Unsal and Hassan (2020), and Kadim and Sunardi (2019) show different results, namely size has a positive effect on leverage in sharia-compliant and noncompliant companies.

H₂: Size affects Leverage.

The effect of Tangibility (TAN) on Leverage

Akbar et al. (2023) shows how tangibility negatively impacts the leverage of both noncompliant and sharia-compliant companies. Other research from Alnori and Alqahtani (2019) shows that tangibility positively affects the leverage of SC (sharia compliant) and NC (noncompliant) companies which indicates that financial markets will be ready to finance companies with high collateral value because these assets have a high surplus value, and take them back in the event of bankruptcy so that these funds can also be used to secure long-term loan financing.

H₃: Tangibility affects Leverage.

The effect of Earnings Volatility (EVAL) on Leverage

Research results from Akbar et al. (2023) shows that whereas earnings volatility has a negative impact on the leverage of noncompliant companies, it has a positive influence on the leverage of sharia-compliant enterprises. Sugiyanto and Ikhsan (2022) shows that positive correlation exists between earnings volatility and leverage of SC and NC companies. This depicts how debt is impacted by earnings volatility, with leverage increasing as earnings volatility tends to increase. Other research from Rashid et al. (2023) confirms that EVAL negatively affects the leverage of sharia-compliant and non-compliant companies.

H₄: Earnings Volatility affects Leverage.

The effect of Growth Opportunities (GO) on Leverage

Growth Opportunities can be calculated as the ratio of equity market value to total assets. Research conducted by Alnori and Alqahtani (2019), in the context of corporate finance, Growth Opportunities has a negative impact on both noncompliant and sharia-compliant companies. Other research conducted by Asikin et al. (2019), demonstrates how growth opportunities negatively affect the leverage among both noncompliant and sharia-compliant companies, if the company's high growth opportunity level can have an impact on the need for greater funding. These funding needs are used to carry out company activities that are greater than before.

H₅: Growth Opportunities affects Leverage.

The effect of Liquidity (LIQ) on Leverage

Akbar et al. (2023) conducted research on 185 non-financial companies mentioned on the Pakistan Stock Exchange during 2008 - 2018 revealed that leverage in SC and NC is significantly adversely impacted by liquidity. Additionally, the research by Rashid et al. (2023) and Yousef (2019) also found a negative effect of liquidity on leverage in sharia-compliant and noncompliant companies. In conformity with the Pecking Order Theory, which argues that finances a company's short-term investments and operational costs rely on its liquidity level.

H₆: Liquidity affects Leverage.

The effect of Non-debt Tax Shield (NDTS) on Leverage

NDTS has a negative influence on the leverage of sharia-compliant and noncompliant companies because the NDTS value is high, thus negatively affecting leverage (Zafar et al., 2019). Meanwhile, Rahim et al. (2020) and Kahya et al. (2020) contend that the leverage of SC and NC companies is positively impacted by NDTS. This means that the higher the NDTS value, the greater the company's tendency to use external sources of funds. This is because a high depreciation rate can make it easier for Sharia-compliant and noncompliant companies to get an injection of funds in the capital market.

H₇: Non-debt Tax Shield affects Leverage.

The effect of GDP Growth (GDPG) on Leverage

Indriani and Rochdianingrum (2022) shows that GDP growth has a negative effect on leverage in sharia-compliant and noncompliant companies. This exhibits that rising GDP growth does not always translate into higher per capita income for each individual. As a result, rising economic growth does not always impact capital market investment patterns, leading investors to become more vigilant about the risks involved in purchasing company stock. Akbar et al. (2023) conclude that GDP growth is positively correlated with leverage in sharia-compliant companies, but negatively correlated with noncompliant companies.

H₈: GDP Growth affects Leverage.

The effect of Business Risk (RISK) on Leverage

Ali et al. (2022) uses short and long-term debt, total debt, and net equity as its dependent variables which are expected to determine the capital structure variable. The research finds that there is a positive and significant relationship between risk and cor-

porate leverage. In contrast, his research conducted by Al-Harby (2019) stated that business risk has a negative and significant effect on leverage. This means that the higher the company's operational risk, the higher the chance of the company going bankrupt, so the company will minimize the use of debt so that operations in sharia-compliant and noncompliant companies continue to run.

H₉: Business Risk affects Leverage.

Table 1. Variable Measurement

Variables	Symbol	Measurement	Reference
Dependent			
Book Leverage	BLEV	$\frac{\text{Total Liabilities}}{\text{Total Asset}}$	(Almustafa & Kalash, 2022)
Market Leverage	MLEV	$\frac{\text{Total Liabilities}}{(\text{Share Outstanding} \times \text{Share Price}) + \text{Total Liabilities}}$	(Minh et al., 2022)
Independent			
Profitability	PROF	$\frac{\text{EBIT}}{\text{Total Asset}}$ $\text{Ln}(\text{Total Asset})$	(Ali et al., 2022)
Size	SIZE	$\frac{\sqrt{\frac{\sum_i^n (\text{EBIT}_i - \overline{\text{EBIT}})^2}{n-1}}}{\text{Total Asset}}$	(Akbar et al., 2023)
Tangibility	TAN	$\frac{\text{Net Fixed Assets}}{\text{Total Assets}}$	(Akbar et al., 2023)
Earnings Volatility	EVAL	$\frac{\sqrt{\frac{\sum_i^n (\text{EBIT}_i - \overline{\text{EBIT}})^2}{n-1}}}{\text{Total Asset}}$	(Saif-Alyousfi et al., 2020)
Growth Opportunities	GO	$\frac{\text{Sales}_t - \text{Sales}_{t-1}}{\text{Sales}_{t-1}} \times 100$	(Akbar et al., 2023)
Liquidity	LIQ	$\frac{\text{Current Asset}}{\text{Current Liabilities}}$	(Akbar et al., 2023)
Nondebt Tax Shield	NDTS	$\frac{\text{Depreciation}}{\text{Total Assets}}$	(Saif-Alyousfi et al., 2020)
GDP Growth	GDPG	$\frac{\text{GDP}_t - \text{GDP}_{t-1}}{\text{GDP}_{t-1}}$	(Akbar et al., 2023)
Business Risk	RISK	$\frac{\text{EBIT}}{\text{Sales}}$	(Hakim & Apriliani, 2020)

RESEARCH METHODS

This disquisition is a quantitative study using secondary information form from the Indonesia Stock Exchange website (<https://www.idx.co.id/id>), Central Bureau of Statistics (<https://www.bps.go.id/>), Yahoo Finance (<https://finance.yahoo.com/>) and the websites of each company. The subject of this study is the consumer cyclicals sector listed on the Indonesia Stock Exchange from 2020-2022. The purposive sampling technique was

used in the sampling process in this study. The criteria used in this study are that the company provides financial reports in rupiah currency, has complete data related to variable measurements (Table 1), and uses the Sharia Securities List published by the Financial Services Authority (OJK) in 2022 to identify sharia-compliant companies. Based on these criteria, there are 96 companies, consisting of 66 SC companies and 30 NC companies. Panel data regression analysis is used to test and analyze the variables that affect the capital structure measured using book and market leverage. Both models in this study are conducted separately on SC and NC companies.

RESULTS AND DISCUSSIONS

Descriptive Statistics

The basis of descriptive statistical analysis is a method that describes how to organize, summarize, and interpret data in an informative manner. This analysis is carried out by calculating the mean, median, and standard deviation of all variables studied in the study which aims to provide information and a simple picture so that it is easier to understand (Table 2).

Table 2. Descriptive Analysis for SC Firms

Descriptive statistics				
Variable	Mean	Maximum	Minimum	St. Dev
BLEV	0.3922	1.0791	0.0067	0.2113
MLEV	0.3171	0.8885	0.0043	0.2182
PROF	0.0009	0.2847	-0.8845	0.1174
SIZE	27.941	31.0954	24.6082	1.4967
TAN	0.3808	0.9643	0.0045	0.2461
EVAL	0.0564	0.6642	0.0017	0.0653
GO	104.3842	17985.60	-95.3422	1279.220
LIQ	4.0633	126.0909	0.0792	12.1670
NDTS	0.0435	1.1751	0.0004	0.1057
GDPG	-1.5932	0.0578	-3.4251	1.4312
RISK	-0.2402	0.9629	-9.9139	1.0441

Source: E-views 9 output results.

Table 3. Descriptive Analysis for NC Firms

Descriptive statistics				
Variable	Mean	Maximum	Minimum	St. Dev
BLEV	5.4206	101.8657	0.0015	16.6663
MLEV	0.5267	0.9982	0.0002	0.3195
PROF	-0.3254	4.9769	-7.5876	1.2669
SIZE	27.1027	31.6819	22.9374	1.7990
TAN	0.3770	0.9856	0.0013	0.3133
EVAL	0.3029	4.3781	0.0034	0.8252
GO	41.2734	1525.046	-98.5299	212.3724
LIQ	4.8788	140.2452	0.0066	18.3907
NDTS	0.0574	2.2239	0.0003	0.2338
GDPG	-1.5932	0.0578	-3.4251	1.4356
RISK	-1.4702	0.7202	-39.8841	4.8799

Source: E-views 9 output results.

Chow and Hausman Test

In the analysis of panel data regression, there are three techniques for estimating model parameters, i.e. Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). To determine the right model, the Chow and Hausman test need to be done. The Chow and Hausman tests for SC and NC firms are reported in Table 4 and 5. To decide the excellent model among CEM and FEM, the Chow test is used. Both in SC and NC, the cross-section Chi-square value in both models is 0.0000, which is lower than 5%, so the null hypothesis is rejected then FEM was selected (Stock & Watson, 2020). If the model chosen is the FEM, then it could be persevered with the Hausman Test to examine whether to use the FEM or REM (Stock & Watson, 2020).

The first model (BLEV) in SC show that the cross-section random probability value is 1.0000, which is higher than 5%, so the decision that can be taken is alternative hypothesis is accepted and then used REM. In the meantime, in NC the null hypothesis is rejected so FEM was chosen. The second model (MLEV) in SC and NC indicates the cross-section random probability value is higher than 5%, which is 1.0000, so the alternative hypothesis is accepted, thus REM is the most appropriate model for this research.

Table 4. Chow and Hausman Test for SC Firms

	Test Summary	Statistic	Prob.	Decision
BLEV	Cross-section Chi-square	660.3692	0.0000	H ₀ rejected, FEM
	Cross-section Random	0.0000	1.0000	H ₀ failed rejected REM selected
MLEV	Cross-section Chi-square	314.3973	0.0000	H ₀ rejected, FEM
	Cross-section Random	0.0000	1.0000	H ₀ failed rejected REM selected

Source: E-views 9 output results.

Table 5. Chow and Hausman Test for NC Firms

	Test Summary	Statistic	Prob.	Decision
BLEV	Cross-section Chi-square	231.5899	0.0000	H ₀ rejected, FEM
	Cross-section Random	164.5308	0.0000	H ₀ rejected, FEM
MLEV	Cross-section Chi-square	183.1930	0.0000	H ₀ rejected, FEM
	Cross-section Random	0.0000	1.0000	H ₀ failed rejected REM selected

Source: E-views 9 output results.

Goodness of Fit Test (Adjusted R²)

The goodness of fit test for SC and NC firms are reported in Table 7 and 8. In SC companies the independent variables are able to explain the variation of book leverage by 16.48% and the variation of market leverage by 12.57% and the remaining 83.52% and 87.42% being determined by variables not covered by this model.

In NC enterprises, the adjusted R² of the REM estimation result for book leverage is 0.9716 and for the market leverage is 0.1521. This indicates that 97.16% and 15.22% independent variables are able to explain the variation of book and market leverage and the remaining 2.84% and 84.78% is unexplained in this equation.

Table 7. Test Results for the Coefficient of Goodness of Fit

	Test Summary	SC Firms	NC Firms
Model 1 BLEV	Adjusted R-squared	0.1648	0.9716
Model 2 MLEV	Adjusted R-squared	0.1257	0.1521

Source: E-views 9 output results.

Simultaneous Test (F-test)

Table 6 present the results of the simultaneous test for SC and NC companies. In SC, the F-test of the REM estimation result on the book and market leverage results in a value of 0.0000 which is lower than 0.05. Meanwhile, in NC companies, the Book Leverage generated an Fstatistic probability of $0.000000 < 0.05$ and the Market Leverage was $0.007024 < 0.05$. Moreover, the analysis performed for this study's results indicates that both in sharia-compliant and noncompliant companies, at least one independent variable affects book and market leverage, making the use of the regression model in this study feasible.

Table 6. F-test Results

	Test Summary	SC Firms	NC Firms
Model 1: BLEV	Prob F-statistic	0.000002*	0.000000*
Model 2: MLEV	Prob F-statistic	0.000068*	0.007024

Notes: *significant at 5% level.

Individual Test (t-test)

t-test is use to clearly identify if each independent variable significantly affects the BLEV and MLEV. Table 8 and Table 9 presented the results of the individual test, it can be seen that there are differences in factors affecting the capital structure in SC and NC. Variables that influence book leverage on SC are SIZE and LIQ, while on NC are PROF and EVAL variables. Market leverage in SC is influenced by PROF, SIZE, EVAL, and LIQ variables, while in NC only PROF, SIZE, and LIQ affect market leverage. On the other hand, TAN, NDTs, and RISK variables do not affect leverage in both SC and NC.

Based on Table 8 and Table 9, the panel data regression equation in this study uses the coefficient value that describes the direction and degree of the independent's impact on the dependent. Models 1 and 2 are models used to see the effect of Capital Structure in SC companies on Leverage. Meanwhile, models 3 and 4 are models used to see how Capital Structure in NC companies affects Leverage, so the model used is as follows:

Model 1:

$$\text{BLEV} = -0.6192 - 0.0234\text{PROF} + 0.0373\text{SIZE} + 0.0069\text{TAN} - 0.2433\text{EVAL} - 4.84\text{E-}06\text{GO} - 0.0027\text{LIQ} - 0.0860\text{NDTS} + 0.0021\text{GDGP} + 0.0071\text{RISK}$$

Model 2:

$$\text{MLEV} = -0.7677 - 0.4559\text{PROF} + 0.0429\text{SIZE} - 0.1021\text{TAN} - 0.8315\text{EVAL} - 1.57\text{E-}06\text{GO} - 0.0031\text{LIQ} - 0.0491\text{NDTS} + 0.0063\text{GDGP} - 0.0144\text{RISK}$$

Model 3:

$$\text{BLEV} = 67.7270 - 2.4002\text{PROF} - 2.2210\text{SIZE} - 17.4123\text{TAN} + 14.1086\text{EVAL} \\ - 0.0010\text{GO} - 0.0104\text{LIQ} - 1.9383\text{NDTS} + 0.2139\text{GDPG} - 0.0575\text{RISK}$$

Model 4:

$$\text{MLEV} = -2.0930 - 0.0325\text{PROF} + 0.0967\text{SIZE} + 0.0136\text{TAN} + 0.0757\text{EVAL} \\ - 1.76\text{E-}05\text{GO} - 0.0028\text{LIQ} - 0.0383\text{NDTS} + 0.0153\text{GDPG} + 0.0998\text{RISK}$$

Table 8. t-test Result for SC Firms

Independent Variable	Dependent Variable			
	Book Leverage		Market Leverage	
	Coef	Prob.	Coef	Prob.
C	-0.6192	-	-0.7677	-
PROF	-0.0234	0.7003	-0.4559*	0.0006
SIZE	0.0373*	0.0107	0.0429*	0.0052
TAN	0.0069	0.9132	-0.1021	0.2287
EVAL	-0.2433	0.1015	-0.8315*	0.0013
GO	-4.84E-06	0.1397	-1.57E-06	0.8337
LIQ	-0.0027*	0.0000	-0.0031*	0.0029
NDTS	-0.0860	0.3261	-0.0491	0.7564
GDPG	0.0021	0.3572	0.0063	0.2531
RISK	0.0071	0.1629	0.0144	0.2035

Notes: *significant at 10% level.

Table 9. t-test Result for NC Firms

Independent Variable	Dependent Variable			
	Book Leverage		Market Leverage	
	Coef	Prob.	Coef	Prob.
C	67.7270	-	-2.0930	-
PROF	-2.4002*	0.0000	-0.0325*	0.0443
SIZE	-2.2210	0.3719	0.0967*	0.0001
TAN	-17.412*	0.0612*	0.0136	0.9078
EVAL	14.1086*	0.0000	0.0757	0.0775
GO	-0.0010	0.5736	-1.76E-05	0.7898
LIQ	-0.0104	0.8276	-0.0028*	0.0477
NDTS	-1.9383	0.2731	-0.0383	0.5441
GDPG	0.2139	0.3409	0.0153*	0.0634
RISK	-0.0575	0.3774	0.0998	0.1814

Notes: *significant at 10% level.

Discussion

The results of the panel data test show that profitability on MLEV has a coefficient of -0.45594 and a significance value of 0.0006, which indicates that there is a significant negative effect on market leverage in sharia-compliant companies. Whereas in noncompliant companies, profitability on BLEV has a coefficient of -2.400225 and a significance value of 0.0000, and profitability on MLEV has a coefficient of -0.032570 and a probability value of 0.0443. This research has revealed that profitability significantly negatively affects leverage, both in SC and NC. This means that if there is an increase in profit-

ability, the leverage will decrease, and vice versa. This study supports Akbar et al. (2023), who found that leverage is adversely impacted by profitability in SC and NC companies.

Our prediction was confirmed when it was proved that the leverage of sharia-compliant companies was significantly positively impacted by size. In particular, only MLEV significantly increases firm size in noncompliant companies. This means that if the company expands which causes the size of the company to increase, the leverage will also increase. The outcome of this research contradict those of Akbar et al. (2023), which insist that size has a negative effect on book leverage in sharia-compliant companies. However, the study's findings strengthen with those Bhat et al. (2023), who claim that size inversely affects leverage.

This research showed that probability value BLEV and MLEV in SC had a probability greater than 10%, indicating that tangibility has no discernible impact on leverage in SC companies. However, this research discovered tangibility and BLEV have a negative impact on noncompliant enterprises, whereas tangibility and MLEV do not greatly affect noncompliant companies. The findings of this work contradict with those of Akbar et al. (2023), who claim that tangibility has a negative effect on leverage in SC and NC. This may occur because this study uses the consumer cyclical sector as a research sample consisting of a mixture of companies that sell products and services. Where, the service companies themselves tend not to have many tangible assets. However, tangibility has no effect on leverage, according to Kalash (2019), which supports the findings of this study.

Earning volatility on MLEV of SC companies has a probability value lower than 0.1 with a negative coefficient (-0.831598). It appears to suggest that there is a notable and negative impact on market leverage. In NC companies, earnings volatility on BLEV has a probability value lower than 10% with a positive coefficient (14.10864), which implies that BLEV is significantly affected in a positive way. This can confirm the prediction of Pecking Order Theory which states that the greater the volatility of income experienced by the company, the greater the possibility of available information being asymmetrical to investors, which causes the higher cost of equity borne by the company. The research results are slightly different from Akbar et al. (2023) who found a positive effect on leverage on SC and a negative effect on BLEV and MLEV on NC. Furthermore, this study's results coincide with those of Ahmeti et al. (2023), who showed that leverage is adversely affected by earnings volatility.

The study's findings indicate that growth prospects have no discernible impact on leverage in either SC or NC companies. The fact that every probability value on GO is greater than 10% serves as proof for this. The study's conclusions do not comply with Akbar et al. (2023) who revealed that growth opportunities in SC and NC companies have a positive impact on leverage. This can be caused by the fact that when company growth is high, the funds needed by the company increase; however, businesses typically use corporate finances rather than external funds for their operational processes. However, Alnori & Alqahtani (2019) validate our findings by indicating that growth opportunities have no discernible impact on leverage.

Liquidity on both leverage measure of sharia-compliant and noncompliant companies has a higher probability than 10% significant level with a negative coefficient. It appears to conclude that there is a notable and negative impact on leverage in SC and NC companies. This means that if the company's liquidity level increases, it will reduce

leverage in SC and NC companies. The results of this study can confirm Pecking Order Theory which states that the usual level of liquidity is used to fund the operating and investment activities of companies that rely more on short-term funding sources than long-term. The study's findings are in accordance with those of Akbar et al. (2023), who found that leverage over both SC and NC is significantly negatively affected by liquidity.

Our theory is not supported by the fact that non-debt tax shields in both SC and NC enterprises have no discernible impact on leverage. This is reflected in the fact that each probability value on the NDTs is higher than 10%. The findings from this research support those of Zafar et al. (2019) study's which established no relationship between capital structure with non-debt tax shields. This might have been caused by the fact that companies have more control over non-debt expenses and can set the right tax strategy to maximize the tax benefits of these expenses.

Consistent with our hypothesis, this study concludes a significant positive relationship between GDP growth on MLEV in noncompliant companies. The results of this study are in line with research Akbar et al. (2023) who find a significant relationship between GDP growth and MLEV on noncompliant firms. The results of this study suggest that there is no significant influence between GDP growth and book leverage and there is a significant influence between GDP growth and market leverage on noncompliant companies. The significance of this study model may be impacted by the outcomes of other measures that have no bearing on GDP because each company's GDP value is constant.

The research showing that risk has no appreciable effect on leverage in both SC and NC firms refutes our theory. The fact that each probability value on the risk is greater than 10% represents this. The research's findings indicate that leverage is unaffected by business risk in both sharia-compliant and noncompliant companies. The findings of this study misrepresent those of Ali et al. (2022) study, which found strong and positive impacts on leverage. This may arise from the fact that different people have diverse tolerances for risk, making it impossible to establish the appropriate capital structure. Nevertheless, Amin and Azis (2023) research, which showed that risk has no remarkable impact on capital structure, lends support to the findings of this study.

CONCLUSIONS AND RECOMMENDATIONS

Financial managers seeking to make decisions on capital structure in both sharia-compliant and non-compliant companies might find guidance from this study regarding factors such as book and market leverage, size, liquidity, profitability, and volatility in earnings. Financial managers might consider factors that influence their decisions on the optimal capital structure by monitoring these metrics. If financial management of non-compliant enterprises intend to lower the company's debt, they should decrease the amount of earnings volatility, but those of sharia-compliant companies should enhance it. In order to optimise the company's capital structure, it can minimize the business risk it faces by lowering the leverage level. Another effort that companies can make to reduce their leverage is to increase liquidity and profitability to get greater free cash flow in order to finance the company's operational activities using these internal funds. Investors might expect a deeper understanding of the capital structure of SC and NC enterprises as an outcome of the study when making investments. According to Stamenković et al. (2023), asset turnover and cost of debt have a considerable positive influence on short-term

leverage. Hence, future researchers can take these and other capital structure factors should be considered.

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